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1911

ANNUAL REPORT

OF

THE DIRECTORS

OF

AMERICAN TELEPHONE & TELEGRAPH COMPANY

TO THE STOCKHOLDERS

FOR THE

YEAR ENDING DECEMBER 31, 1911

NEW YORK, 1912

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American Telephone & Telegraph Company

OFFICERS

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Vice Presidents

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U. N. BETHELL

WILLIAM R. DRIVER

N. C. KINGSBURY

B. E. SUNNY

H. B. THAYER

CHARLES P. WARE

Treasurer

WILLIAM R. DRIVER

Secretary

CHARLES EUSTIS HUBBARD

Comptroller

CHARLES G. DuBOIS

General Counsel

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Chief Engineer

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REPORT OF THE DIRECTORS
OF
AMERICAN TELEPHONE AND TELEGRAPH
COMPANY.

NEW YORK, March 20, 1912.

TO THE STOCKHOLDERS:

Herewith is respectfully submitted a general statement covering the business of the Bell System as a whole, followed by the report of the American Telephone and Telegraph Company, for the year 1911.

BELL TELEPHONE SYSTEM IN
UNITED STATES.

SUBSCRIBER STATIONS.

At the end of the year the number of stations which constituted our system in the United States was 6,632,625, an increase of 749,906, including 306,403 connecting stations. 2,158,454 of these were operated by local, co-operative and rural independent companies or associations having sub-license or connection contracts, so-called connecting companies.

TELEPHONE TOLL STATIONS.

The Bell telephone toll lines of the United States now reach 70,000 places, from many of which a telegraph message can be sent. The extent of the system is best realized by comparison with less than 65,000 post offices, 60,000 railroad stations and regular telegraph offices at about 25,000 places.

WIRE MILEAGE.

The total mileage of wire in use for exchange and toll service was 12,932,615 miles, of which 1,290,403 were added during the year. Of the total mileage nearly 11,000,000 miles were exchange wires, and 2,000,000 toll wires. These figures do not include the mileage of wire operated by connecting companies. Of this total wire mileage 6,831,667 is underground, including 411,406 miles of toll wires in underground cables. The most important development is in the Boston-Washington Subway, now completed with the exception of drawing the cable into the Providence-New Haven section. This subway will be about 450 miles in length, and contain about 2,100 miles of single duct and 79,000 miles of wire in the first cable.

TRAFFIC.

Including the traffic over the long-distance lines, but not including connecting companies, the daily average of toll connections was about 645,000, and of exchange connections about 23,484,000, as against corresponding figures in 1910 of 602,500 and 21,681,500; the total daily average for 1911 reaching 24,129,000, or at the rate of about 7,770,000,000 per year.

TRAFFIC OF THE UNITED STATES AND EUROPE.

Instructive as it would be to compare the traffic of the other two branches of transmission of intelligence—the mail and the telegraph—with the telephone traffic of the world such a comparison would only be speculative on account of the lack of statistical material. There is however, sufficient statistical information to permit a comparison of the traffic of these three services, both in

the United States and in Europe, during the year 1909. The result is as follows:

Type of Message.	EUROPE		UNITED STATES	
	Number During 1909	Per Cent. of Total Europe	Number During 1909	Per Cent. of Total U. S.
First Class Mail				
Matter.....	15,387,000,000	74.4%	8,793,000,000	40.9%
Telegrams.....	345,000,000	1.7%	98,000,000	0.4%
Telephone Con- versations.....	4,937,000,000	23.9%	12,617,000,000	58.7%
Total	20,669,000,000	100.0%	21,508,000,000	100.0%

In other words, although Europe has about three and half times the telegraph traffic of the United States, and nearly twice the first-class mail traffic, it has only one-third the telephone traffic of the United States.

The use of the telegraph in Europe was about 2 per cent. of the mails, while in the United States it was but 0.2 per cent., the greater efficiency and distribution of the telephone causing the difference.

PLANT ADDITIONS.

The amount added to plant and real estate by all the companies, excluding connecting companies, constituting our system in the United States during the year 1911 was \$55,660,738, distributed as follows:—

Real Estate.....	\$ 3,411,992
Equipment.....	18,282,765
Exchange Lines.....	20,548,080
Toll Lines.....	11,624,173
Construction Work in Process.....	1,793,728
	\$55,660,738

PLANT ADDITIONS OF PREVIOUS YEARS.

The amounts added in twelve years have been as follows:—

1900.....	\$31,619,100	1906.....	\$79,366,900
1901.....	31,005,400	1907.....	52,921,400
1902.....	37,336,500	1908.....	26,637,200
1903.....	35,368,700	1909.....	28,700,100
1904.....	33,436,700	1910.....	53,582,800
1905.....	50,780,900	1911.....	55,660,700

Making a total for the twelve years of \$516,416,400.

CONSTRUCTION FOR THE CURRENT YEAR.

Estimates of all the associated operating companies and of the American Telephone and Telegraph Company for all new construction requirements in 1912 have been prepared. It is estimated that about \$56,000,000 will be required for current additions to plant in 1912, of which amount some \$30,000,000 will be provided by the existing and current resources of the companies. All who are responsible for these expenditures are working in complete understanding of these estimates and the limits set on their expenditures.

MAINTENANCE AND RECONSTRUCTION.

During the year \$58,840,000 was applied out of revenue to maintenance and reconstruction purposes; of this, over \$12,000,000 was unexpended for those purposes.

The total provision for maintenance and reconstruction charged against revenue for the last nine years was over \$342,300,000.

RESERVES AND DEPRECIATION.

While Commissions and all thorough investigators are agreed that provision must be made out of current revenue for depreciation and future replacement of plant there seems to be some tendency on the part of others to question any accumulation of reserves.

To make adequate provision for future contingencies it would seem to be plain that in an increasing business there must also be an increasing reserve.

There seems to be a tendency to insist that "betterment" of every character shall be represented by capital issue, and that depreciation reserve should be determined with precision, and that it, and all reserves beyond

it represent excessive gross charges; that is, gross charges greater than are necessary for the legitimate purposes of the company.

Reserves are a provision for deterioration and obsolescence of plant beyond that which can be covered by current maintenance and current replacements, and also for deterioration of assets and for fluctuations in gross and net revenue caused by varied business conditions. If there were an exactly ascertainable condition, with which all practice is in accord, many of the difficulties and differences of opinion connected with this question would disappear.

If the plant were kept in the highest possible state of efficiency by the expenditure of current revenue for repairs, maintenance and replacements, sufficient to maintain the plant at the highest possible efficiency, it could be operated perpetually and would never have to be replaced. Between this, and maintenance which barely keeps the plant in service, there is a wide margin, and in this margin is the origin of nearly all the differences as to cost of service, and in it is the opportunity to show large apparent profits at the cost of the future of the plant.

There are, however, in the conduct of business many conditions and possibilities which can not be met out of current net revenue and should not be met out of capital, but which if not provided for in some way would put all industrial companies upon a speculative basis.

There is that obsolescence which comes from revolutionary improvements necessitating wholesale replacements of obsolete apparatus or plant, such as the replacement of overhead systems by underground systems, or such as took place when the present method of operating was introduced. There are those fluctuations in net revenue caused by business depression which cannot be overcome by immediate reduction of fixed charges, overhead expenses or operating costs. There is that constant tendency to increase in wages and cost of

material, that tendency to increase in operating expenses and capital charges caused by the constant demand for increased efficiency or service, that demand for extensions, productive and unproductive, and that call for improvements in plant, equipment and apparatus. There is that increase in costs of operating, in greater ratio than the increase in business, peculiar to some branches of the telephone service.

These and many other possibilities always confronting industrial and public service undertakings must be provided for. They are not the subject of capital expenditures, and can only be provided for by an accumulating surplus and reserves invested in productive plant or securities. If these are not provided for, trouble if not disaster or destruction is inevitable.

Any practice which does not, at the cost of revenue, pass the property on from the present to the future in at least as good a condition as received from the past, is a mistaken practice; it is using capital for the benefit of the present at the expense of the future.

The main objections urged against an accumulating surplus are the following:

1. That it is provided out of excessive charges to the public for service.
2. That it tends to extravagance of operation, on the theory that close margins tend to greater economies.
3. That it affords a way of giving exorbitant and unreasonable dividends to the shareholders by some form of distribution of the surplus from time to time.

The answer to the third objection depends somewhat on the treatment and ultimate disposition of the unappropriated surplus reserves.

If these reserves are to remain as assets of the company, *indivisible*, *inviolable* and *inalienable* except for the purposes above mentioned, invested in productive property, it removes the strongest and only really tangible objection to surplus of the character herein advocated.

So far as the American Telephone and Telegraph Company and associated controlled companies are concerned, the third objection can be dismissed with the statement of their policy, which is as follows:

Except where in the extension of business extraordinary risks are taken which entitle them to some extra profit in consideration of such risks, or the net returns have not been sufficient to make an adequate return, if any, on the capital, the American Telephone and Telegraph Company and associated utilities controlled by it are and will be satisfied with reasonable average returns on their outstanding capital obligations, which compared with other business investments should be about 8 per cent., and will not expect or encourage any expectation of more than this; and in those excepted instances above referred to, they will only ask for that reasonable return which any equitable commission or court would award them.

As to the second objection. The most important and controlling factors of all charges for service are fixed charges and operating expenses. All public service companies not now, will soon be under government control and regulation, and all charges and expenditures will be under the close scrutiny of these regularly constituted bodies. If this does not protect against extravagance, nothing will.

In answer to the first objection, the many and marked peculiarities of the telephone and telegraph as distinguished from other public utilities justify ample surplus reserves.

Any new railroad or plant of local transportation company, gas or electric light mains must be constructed at least of a certain minimum standard or capacity, and as the cost of construction does not increase in nearly the same ratio as the increase in capacity, a large increase of business is always provided for in the building of any new plant. Another important consideration in the size of plant constructed is, that in emergencies large overloads can be carried on plants of this character for considerable

periods. For these and other reasons, additional capital expenditure is not continuous, seldom if ever, is imperative, financing arrangements can be definitely anticipated for long periods and adapted to the most favorable conditions and times.

With the telephone and telegraph, the case is entirely different. Except below relatively small minimum units, the telephone plant is built according to the business that is expected in the immediate future, and the plant necessary for the development of business can be added as needed, and to save charges on idle plant this is done. It is sometimes advantageous to anticipate growth, and it is often but only done *when the saving in construction costs and other advantages more than balance the cost of carrying the idle plant*. There can be no overload in the telephone business, the capacity of the plant must be equal to the peak of the business and to all possible emergencies. Each increase in business calls for an additional telephone circuit and each telephone circuit calls for additional capital expenditure, and under the requirements of the business all demands for extension of service are imperative and must be met at once.

This makes necessary regular periodical provisions for financing, which must be met regardless of the general business conditions.

Another and a marked disadvantage of the telephone business as compared with other public services is that the capital expenditure for gas or electric light plant is confined to generating plant and distributing mains; the customer's connection from street to house and the inside house installation are done with the capital and at the cost of the customer.

With the telephone each additional subscriber calls for capital expenditure from the central office to the house or place of business, and for all interior installation and wiring. This interior installation, representing large expenditure, is a burden not only on the capital but on the net revenue of the telephone, from which

other service companies are free. For every one hundred thousand stations gained in 1911, two hundred and seventy-two thousand stations were installed. All the cost of the one hundred and seventy-two thousand, over and above the salvage, which is variable and small at best, is a charge upon revenue, and a general charge on all permanent subscribers, which would not be the case if the interior installation were at the expense of the subscriber.

All the advantages of an unexpended surplus reserve, which remains invested in an inalienable asset of the company, namely in productive plant, accrue to the public by the reduction of revenue which it is not necessary to earn to meet the capital charges, as the plant which is constructed out of these surplus reserves does not represent capitalization.

Among the more important advantages to a company of a large surplus represented in the fixed assets are the following:

It strengthens the company's credit, enabling the company to make its interest and dividend payments uniform and dependable.

It enables the company on the strength of this credit to obtain its capital requirements on the most favorable terms.

It enables the company to ride out commercial and financial disturbances which might otherwise cripple or destroy it.

It enables the company to maintain at all times the highest state of efficiency in its operation, which would be impossible for any company which is obliged to adjust its more or less inflexible operating expenses to the constant and inevitable fluctuations of business.

It is a reservoir, as it were, which, supplied by a fluctuating stream of gross revenue, enables the company to maintain even and uniform disbursement for service, maintain a uniform operating organization, and that high state of efficiency which can result only from a permanent operating force.

To reduce rates as fast as any surplus is created, to forbid any application of revenue to the betterment of plant, to insist that new capital shall be provided for such purposes, would never be thought of in any private business and should not in any corporate business, particularly public utilities, subject to other regulation and control than that of actual ownership. In individual or partnership business all revenue beyond stipulated amounts is left in the business, is a reserve, and in addition there is that reserve consisting of the entire assets of the individual. This is the basis of business credits.

The only sound conclusion that can be reached after full consideration of all the various phases and factors of the problem is, that ample reserves should be provided to meet not only probable happenings but possible happenings, and that such reserves should be so invested that whatever increment or revenue is to be derived from the amounts unexpended or not used for the purposes intended will go to the public in reduction of charges for or in improvement of, service, and that the value of a public utility plant should be represented by a relatively small percentage of outstanding securities calling for fixed charges.

No expenditure which does not produce increased net revenue should be capitalized.

Any public service plant which is represented by relatively small outstanding capital obligations is stronger, can better meet its public obligations, and so long as the surplus is inviolable and inalienable as above defined, and the company under government control and regulation, the greater the ratio of surplus and reserves to plant, the nearer we get to all the supposed advantages of public ownership without any of its risks, while retaining all the advantages of private management.

OPERATING RESULTS FOR THE YEAR.

The following tables show the business for the year of the Bell Telephone System including the American

BELL TELEPHONE SYSTEM IN UNITED STATES.

COMPARISON OF EARNINGS AND EXPENSES, 1910 AND 1911.

(ALL DUPLICATIONS, INCLUDING INTEREST, DIVIDENDS
AND OTHER PAYMENTS TO AMERICAN TELEPHONE AND
TELEGRAPH COMPANY BY ASSOCIATED HOLDING
AND OPERATING COMPANIES, EXCLUDED.)

	1910.	1911.	Increase.
Gross Earnings.	\$165,612,881	\$179,477,998	\$13,865,117
Expenses—Operation.	\$ 54,235,449	\$ 60,085,425	\$ 5,849,976
Current Maintenance. ...	25,763,082	30,184,522	4,421,440
Depreciation.	26,264,927	28,655,832	2,390,905
Taxes.	8,355,015	8,965,922	610,907
Total Expenses.	\$114,618,473	\$127,891,701	\$13,273,228
Net Earnings.	\$ 50,994,408	\$ 51,586,297	\$ 591,889
Deduct Interest.	11,556,864	13,610,860	2,053,996
Balance Net Profits.	\$ 39,437,544	\$ 37,975,437	\$ 1,462,107*
Deduct Dividends Paid. ...	25,160,786	25,966,876	806,090
Surplus Earnings.	\$ 14,276,758	\$ 12,008,561	\$ 2,268,197*

COMBINED BALANCE SHEETS, 1910 AND 1911.

(DUPLICATIONS EXCLUDED.)

ASSETS:	Dec. 31, 1910.	Dec. 31, 1911.	Increase.
Contracts and Licenses..	\$ 2,943,381	\$ 2,943,381	\$
Telephone Plant.	610,999,964	666,660,702	55,660,738
Supplies, Tools, etc.	20,987,551	20,749,568	237,983*
Receivables.	26,077,802	32,916,127	6,838,325
Cash.	27,548,933	41,878,140	14,329,207
Stocks and Bonds.	64,766,089	66,777,231	2,011,142
Total.	\$753,323,720	\$831,925,149	\$78,601,429
LIABILITIES:			
Capital Stock.	\$344,645,430	\$379,727,832	\$35,082,402
Funded Debts.	224,791,696	241,032,822	16,241,126
Bills Payable.	42,566,943	41,198,431	1,368,512*
Accounts Payable.	21,721,125	23,382,438	1,661,313
Total Outstanding Obligations.	\$633,725,194	\$685,341,523	\$51,616,329
Surplus and Reserves. ...	119,598,526	146,583,626	26,985,100
Total.	\$753,323,720	\$831,925,149	\$78,601,429

* Decrease.

Telephone and Telegraph Company and its associated holding and operating companies in the United States, but not including connecting independent or sub-licensee companies, nor the Western Electric Company and Western Union Telegraph Company except as investments in and dividends from those companies are included respectively in assets and revenue. All inter-company duplications are eliminated in making up these tables so that the figures represent the business of the system as a whole in its relations to the public.

The gross revenue collected from the public in 1911 for telephone service by the Bell System—not including the connected independent companies—was \$179,500,000; an increase of nearly \$14,000,000 over last year. Of this, operation consumed \$60,000,000; taxes \$9,000,000 or one and one-half per cent. on the outstanding capital; current maintenance, \$30,200,000; and provision for depreciation, \$28,700,000.

The surplus available for charges, etc., was \$51,600,000 of which \$13,600,000 was paid in interest and nearly \$26,000,000 was paid in dividends.

The total capitalization, including inter-company items and duplications, of the companies of the Bell System is \$1,186,639,036. Of this \$524,679,951 is owned and in the treasury of the companies of the Bell System. The capital stock, bonds and notes payable *outstanding in the hands of the public at the close of the year* were \$662,000,000. If to this be added the current accounts payable \$23,400,000, the total outstanding obligations of every kind were \$685,400,000, as against which there were liquid assets, cash and current accounts receivable of \$74,800,000, leaving \$610,600,000 *as the net permanent capital obligations* of the whole system outstanding in the hands of the public.

Against these obligations, the companies had actual tangible property, not including franchises, patents and good will, which cost \$754,200,000, an excess of 23 per cent. over the obligations.

For the year there was an increase in assets of \$78,600,000, of which \$55,600,000 represented current additions to plant, including the necessary real estate. This increase of \$78,600,000 is represented by \$51,600,000 increase in outstanding obligations for the whole system, and an increase in surplus of \$27,000,000. Of this \$27,000,000 surplus about \$4,500,000 represents premiums on capital stock received through conversion of bonds.

This surplus, which does not include any of the intangible, though necessary and valuable assets, is invested in productive property not represented by any capital charges, the revenue from which enables the company to maintain its efficiency and at the same time make concessions to the public in the way of gross charges.

AVERAGE OPERATING UNITS OF ASSOCIATED
OPERATING COMPANIES.

(See table on page 17.)

The table on page 17 shows average operating revenue and expenses per station, operating ratios, unit plant costs, etc., of the associated operating companies (not including the American Telephone and Telegraph Company's long-distance lines), for the years 1895, 1900, 1905, 1910 and 1911.

It will be noted that there has been a steady decrease in revenue per subscriber's station, so that now the average subscriber pays for a higher grade, more comprehensive service, less than half what he paid sixteen years ago for the much less useful service that was then possible.

The use of the subscriber's station for the unit of telephone statistics is unsatisfactory, as the relative character of the subscriber's station is variable, but it is the only unit that gives any idea of growth or comparison and has been used so long that until something better is found it will to a certain extent answer the purpose.

This reduction in cost of service to the user has made it possible for every one who needs a telephone to have

one and to get the great advantage of being within reach of everybody by telephone.

Although there has been a decrease in cost of operation every year till 1910, an increase in 1911 over 1910 is to be noted. This is mostly accounted for by increased operators' wages. This item will increase steadily not only from the general causes which influence wages, but from the fact that each year the growing complexity of telephonic apparatus and equipment, and the demands for improved service, make greater demands on the capacity and efficiency of our employees.

The greatly decreased plant investment per station to which attention has been called in previous annual reports has been still further reduced during the year to \$141, notwithstanding the extensive additions to toll lines and the continued increase in the proportion of wires underground. This low cost of plant and a decreasing maintenance cost are only made possible by the central supervision of engineering and manufacturing of the Bell System and by advance construction on a large scale.

WESTERN ELECTRIC COMPANY.

The Western Electric Company shows marked improvement in operation during the year. The concentration of its manufacturing operations at Hawthorne, not entirely completed, already shows advantageous results. The gross business for the year was \$66,212,000. The foreign business of the company continues favorable. The instruments and apparatus used by the Bell System manufactured by this company, continue to be the standard the world over.

DISPOSITION OF GROSS REVENUE OF BELL SYSTEM, YEAR 1911.

The diagram shows the distribution of the gross revenues received from the public. Probably no industry of national scope pays back to the same com

AVERAGE OPERATING UNITS OF ASSOCIATED OPERATING COMPANIES, 1895 to 1911.

(THIS TABLE COVERS THE COMPANIES OWNING ALL THE
EXCHANGES AND TOLL LINES OF THE BELL TELEPHONE
SYSTEM EXCEPT THE LONG-DISTANCE LINES OF
AMERICAN TELEPHONE AND TELEGRAPH CO.)

Average per Exchange Station.

EARNINGS:	1895.	1900.	1905.	1910.	1911.
Exchange Service.....	\$ 69.75	\$ 44.68	\$ 33.31	\$ 31.28	\$ 30.85
Toll Service.....	11.35	12.60	9.95	9.47	8.98
Total.....	\$ 81.10	\$ 57.28	\$ 43.26	\$ 40.75	\$ 39.83

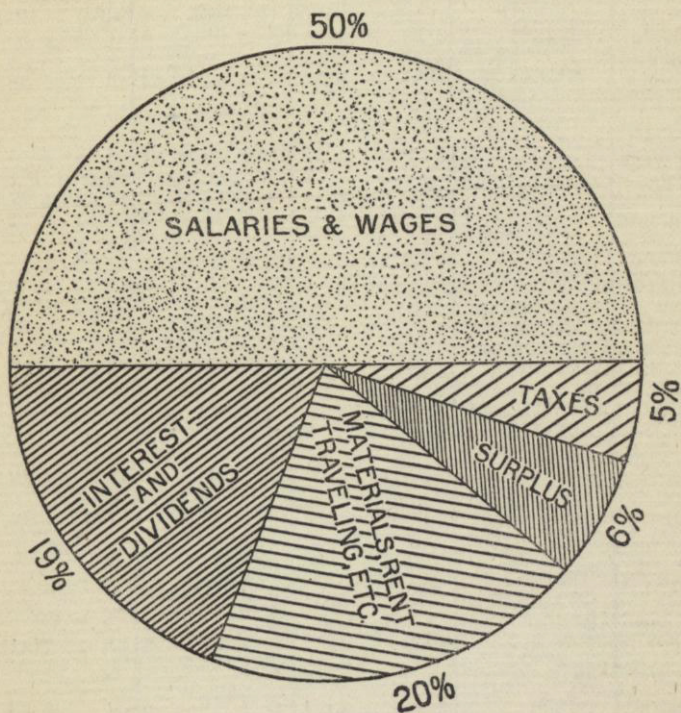
EXPENSES:

Operation.....	\$ 29.15	\$ 21.63	\$ 16.96	\$ 15.14	\$ 15.36
Taxes.....	2.23	2.37	1.49	2.00	1.94
Total.....	\$ 31.38	\$ 24.00	\$ 18.45	\$ 17.14	\$ 17.30
Balance.....	\$ 49.72	\$ 33.28	\$ 24.81	\$ 23.61	\$ 22.53
Maintenance and Depreciation.....	\$ 26.20	\$ 17.68	\$ 13.91	\$ 13.46	\$ 13.41
Net Earnings.....	\$ 23.52	\$ 15.60	\$ 10.90	\$ 10.15	\$ 9.12
Per Cent. Operation Expense to Telephone Earnings....	35.9	37.8	39.2	37.2	38.6
Per Cent. Telephone Expense to Tel. Earnings....	71.0	72.8	74.8	75.1	77.1
Per Cent. Maintenance and Depreciation to Average Plant, Supplies, etc.....	9.1	8.4	8.9	9.5	9.2
Per Cent. Increase Exchange Stations*.....	15.7	26.5	24.5	11.8	10.8
Per Cent. Increase Miles Exchange Wire*.....	15.9	33.2	27.2	12.0	12.3
Per Cent. Increase Miles Toll Wire*.....	21.3	25.2	12.4	11.5	6.5
Average Plant Cost Per Exchange Station (including Exchange and Toll Construction).....	\$260	\$199	\$145	\$142	\$141
Average Cost per Mile of Wire (Toll) (including Poles and Conduits).....	\$ 81	\$ 71	\$ 62	\$ 66	\$ 68
Per Cent. Gross Telephone Earnings to Average Plant	33.4	31.7	31.7	29.3	28.7
Per Cent. Net Profits to Average Capital Stock.....	10.11	9.44	8.34	8.48	7.93
Per Cent. Dividends to Average Capital Stock.....	5.07	6.19	5.75	6.31	6.30

*Increase during year shown, over previous year.

munities a larger percentage of the revenues that it receives from them. Salaries, wages, taxes, maintenance and other operating expenses are distributed very closely in proportion to the amounts paid for telephone service, while the amount paid in dividends and interest, 19 per cent. of the whole, was distributed to over 100,000 individuals distributed over the whole country.

DISPOSITION OF THE GROSS REVENUE OF THE
BELL SYSTEM, YEAR 1911.



REPORT OF THE AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

EARNINGS.

The net earnings of the American Telephone and Telegraph Company for the year were \$33,301,245.77, an increase of \$1,368,031.28 over 1910. The interest charges were \$5,567,980.30, and the dividends at the regular rate of 8 per cent. were \$22,169,449.79. Of the balance, \$5,563,815.68, there was carried to Reserves \$2,800,000.00 and to Surplus \$2,763,815.68.

No dividend on the stocks of the associated companies was increased during the year excepting the increase from 6 per cent. to 7 per cent. in the rate on the stock of the New England Telephone and Telegraph Company, made in the second quarter of the year.

During 1910 and 1911 over \$23,000,000 of capital advances to associated companies were exchanged for stock of those companies. This exchange was for the most part in non-dividend paying companies that the Parent Company had been obliged to finance and build up from the depressed condition resulting from causes which were prevalent in the early days of the business, companies in which there was only a small percentage of the stock outstanding. These companies either now are or soon will be upon a secure, conservative, dividend-paying basis. The resulting decrease from this cause in the American Telephone and Telegraph Company's revenue is at the rate of over \$825,000 per year, that amount additional remaining in the surplus of companies in which this company has about 95 per cent. interest.

ISSUES OF CAPITAL STOCK AND BONDS.

On June 20, 1911, the stockholders were given an opportunity to subscribe at par for new stock in the

proportion of one new share for every five shares of record June 30, and it was provided that the payments in settlement of subscriptions might be made either in full November 1, 1911; or in four equal instalments at the following dates: November 1, 1911; February 1, 1912; May 1, 1912; and August 1, 1912; or in full on any instalment date; adjustments of interest and dividends being made so that the net charges to be borne by the company will be at the rate of 4 per cent. up to instalment dates, and thereafter at the company's dividend rate.

Practically all of the \$55,086,500 stock offered was subscribed for and \$41,200,700 was paid for and issued under date of November 1, 1911. In addition, payments of \$2,522,209.52 on instalments were received and are shown in the balance sheet under Capital Stock Instalments.

The conversion rate of the convertible bonds was reduced at July 1, 1911, by reason of the new stock offered to stockholders and under the terms of the Trust Indenture, from 133.7374 to 126.4391. At the close of business, December 31, 1911, \$129,541,000 of the \$150,000,000 convertible bonds sold had been handed in for conversion, leaving outstanding at that date \$20,459,000, a reduction in 1911 of \$18,482,000.

Due to the conversion of the bonds and the stock taken on subscriptions, there has been an increase of \$55,091,900 in the outstanding share capital. The number of shareholders, 47,341, on December 31, 1911, shows an increase of 6,960 during the year, and increased to 49,011 on March 1, 1912. The distribution is general, there being 41,016 shareholders who hold less than 100 shares each, 5,971 who hold from 100 to 1,000 shares each, 324 who hold from 1,000 to 5,000 shares each and 30 who each hold 5,000 shares or more. The average number of shares held was 67. A majority of the company's stockholders are women. Less than 8 per cent. of the stock was at December 31st in the names of brokers.

The remaining \$17,300,000 of 4 per cent. Collateral

Trust Bonds have been used during the year, together with other assets of the company, to carry out the policies of the company in the acquisition of independent or opposition telephone companies, and in the acquisition of minority interests in the associated companies, as a part of the plan for the rearrangement of their territories.

Of the \$49,000,000 increase in the shares of our associated companies shown in the balance sheet, less than \$1,500,000 represents new issues for current construction purposes. The balance was acquired by purchase or exchange, or was new stock received in payment for notes held by the company.

The revenues of the company will not be affected, except favorably, by these exchanges or purchases, as they were substantially all made on the basis of present revenues, while they give the company a larger interest, about 87 per cent., in the divisible surplus earnings of the associated companies, and it is upon their earnings that the whole prosperity of the company depends. The dividends from the shares of these companies constitute a large part of the revenue of the American Telephone and Telegraph Company.

The total outstanding capital stock and bonds of the American Telephone and Telegraph Company at December 31, 1911, were as follows:

Capital Stock.....	\$318,427,500
4 Per Cent. Collateral Trust Bonds..	78,000,000
4 Per Cent. Convertible Bonds.....	20,459,000
Total.....	<u>\$416,886,500</u>

For the \$318,427,500 capital stock, \$339,633,235 has been paid into the treasury of the company; the \$21,205,35 in excess of par value represents premiums. All discounts on the bond issues have been charged off. The outstanding capital obligations therefore represent over \$21,200,000 more than their par value.

LEGAL.

The Legal Department reports that the relations of the company and its associated companies with the Public Service Commissions of the several states have continued to be of a very satisfactory character. Our companies have co-operated with the Commissions in the endeavor to provide the best possible service. There are now Commissions with jurisdiction over telephone companies in twenty-eight states. Some of the decisions of these Commissions are illuminating, and support what we consider to be the soundest policy.

In a recent case before the Board of Public Utility Commissioners of the State of New Jersey that Commission stated:

"Assuming that adequate regulation in the public interest is provided, this Board avows its conviction that unified and exclusive control and operation of telephones within a given area is preferable to a competing telephone system with its inevitable disadvantages of divided service and duplicated cost."

The Nebraska Commission has approved our plan for co-operating with the independent interests in giving universal service, and the legislatures of Ohio and Michigan have passed laws providing for the consolidation and merger of competing telephone companies under proper regulation.

In the so-called Rate Case, the Maryland Commission stated that everyone sees at once that the rule of fairness requires that every consumer should pay for his own actual use, and it is not easy to find a reason that would justify a different rule in the case of telephone service. The Commission thus sustained our position in regard to measured service in large cities as against flat rates.

The Board of Public Utility Commissioners of the State of New Jersey in the Camden Rate Case decided that it is not practicable at all, or would involve undue and unnecessary delay to segregate and isolate service

and cost within restricted municipal areas. The Board is of the opinion that to reach a proper basis on which a reasonable return may be earned the entire property of the system of the telephone company inventoried will suffice. This decision is in line with our conception of a universal system and sustains our position that a basis of rates should not be confined to an exchange area.

We have not carried into the courts a large number of cases, but it has been our good fortune to be almost uniformly successful in those which have been submitted to their decision.

ENGINEERING.

The year 1911 has, as usual, been an active one for the general engineering staff maintained at headquarters for the benefit of the associated companies throughout the United States. For every one of these companies a large number of important problems have been studied and solved and further substantial progress has been made in the improving and standardizing of apparatus and in the development of improved methods of rendering the telephone service to the public.

In improving the transmission of speech a most important work has been the development of methods whereby the loading coil invention can be applied to the heaviest gauge wires and whereby such wires, when equipped with loading coils, can be operated on the phantom principle. By this means telephone service is now successfully accomplished between New York and Denver and the transmission of speech between cities less far apart has been greatly improved. By the application of the phantom principle to such circuits the available facilities have been largely increased so that between the important telephone centers notable improvements in service have been accomplished.

In long underground cables improvements have also been made so that the phantom principle may be em-

ployed in them, and the range over which speech may be transmitted has been so far increased that when this type of cable is installed between Boston and Washington it will be possible to talk underground between those cities and all of the intermediate points, which would have been impossible under the previous state of the art.

Engineering supervision has been given to the testing and inspection of construction material for the associated companies, amounting in value to \$20,000,000.

Fundamental plans have been made for the associated companies in twenty cities. These provide for the proper location of subways and central offices so as to insure the most efficient growth of the plant. The construction contemplated in these plans amounts to more than \$100,000,000.

The extraordinary advance in the price of tin, which enters into the construction of underground cable sheaths, and of platinum, which enters into the construction of the apparatus, has been more than compensated for by our improvements in cable manufacture whereby a small amount of antimony may be substituted for a larger amount of tin, and by our new methods of using platinum. Although less than three per cent. of tin has been used in the cable sheaths the expense for tin has been \$700,000 a year, and for platinum used in telephone apparatus the expense has been \$550,000 a year. These figures have been cut about in half.

A study has been conducted looking to the more complete utilization of the existing plant of the associated companies, so that as far as possible increasing business could be met by improved methods of working instead of by new construction. By the use of these methods new plant construction amounting to upwards of \$5,000,000 is avoided.

In addition to the hundreds of special engineering problems which have been worked out for the various companies, nearly 200 bulletins on engineering subjects and general specifications have been issued to them.

In different parts of the country a large number of important central office installations have been planned. When completed the expenditure based upon these plans will amount to \$10,000,000.

In co-operation with the Insurance Department of the company there has been furnished to the associated companies the latest information concerning fire prevention and the adoption of methods whereby most advantageous insurance rates have been obtained for them.

Interference from electric light and power wires has been studied during the year in connection with a number of national engineering bodies. Important results have been obtained and standard specifications adopted providing for the safe crossing of high tension wires and signaling wires and for their construction when the two classes of wires must come into proximity. Conducted upon a national basis, these results are applicable to all of the associated companies.

Some hundreds of new inventions have been examined, tested, reported upon and developed and by keeping in close touch with the associated companies valuable ideas originating in any of them have been promptly communicated to the others.

General engineering and scientific discoveries in this country and abroad have been carefully followed and where containing possibilities of improvement in the telephone service or plant, the new ideas have been tested and the results made immediately available for each of the associated companies.

REARRANGEMENT OF TERRITORY.

There has been some misunderstanding in connection with the acquisition of the minority interests of certain associated companies. In every one of these companies the American Telephone and Telegraph Company already owned a controlling interest, in fact, held about 70 per cent. of the whole, which has been increased to over 95

per cent. by the recent acquisitions. Each of the companies was an integral part of the Bell System. Each of the companies was connected with the others by the long-distance lines of the American Telephone and Telegraph Company, and each of the companies under license contract with that company.

The company is now in a position to carry out its policy of "rearrangement of territory," as outlined in previous reports, and without raising questions of conflicting interests, so to arrange the territory that it will conform to commercial and natural lines. In the few cases covering small areas not embraced in this control, the working arrangements are harmonious and the operations in perfect accord with the whole system.

The ultimate object and the reasons for this rearrangement are briefly as follows:

Any telephonic connection must be continuous from any point of communication, as a center, to any point to be communicated with, even to the utmost speaking distance. To obtain continuous speaking circuits there must be uniformity of practice and equipment and perfect co-operation in "operation" over the whole circuit. Therefore, there can be no restrictive or interfering boundaries between exchanges of a telephone system, and any system should be co-extensive with any territory naturally intercommunicating from national, geographical, or racial reasons.

To have this uniformity and co-operation there must be common interest, under common control, either through ownership of property, ownership of controlling interest, combination, or agreement; whichever way it is, it must be sufficiently strong to constitute practically one system, intercommunicating, interdependent, universal.

(See discussion of relations and object of rearrangement in previous reports, particularly 1909, 1910.)

So long as each state retains control of its intra-state affairs and its corporate creations, and so long as interstate traffic and interstate service corporations cannot

be detained by state boundaries, so long will some sort of state recognition of the corporations of other states or some corporate machinery be necessary in each state to bring all service corporations doing an interstate business under state control and operative conditions within each state.

ORGANIZATION OF THE BELL SYSTEM.

Under this rearrangement of territory the American Telephone and Telegraph Company, controlling the entire Bell System, will as it has in the past exercise the functions of a "centralized general administration." All questions of policy common to all, all common matters which may have an effect upon the system as a whole, will be settled by the Central Administration. As one administration will do for all what each would have to do for itself, it has the advantage of economy and will maintain uniformity.

For operating purposes there will be eight or ten divisions with boundaries determined by present commercial conditions, instead of a much larger number of divisions with boundaries fixed more or less accidentally or by other considerations prevailing twenty-five or thirty years ago. Each division whether operated directly or through corporate organizations will have a responsible local administration, supreme in the "intra-division" operations. Each division in turn will be divided into districts with a subordinate but responsible local administration, and in many cases these districts will be divided into sub-districts. In each district or sub-district there will be a subordinate but responsible local representative who will in all local routine matters be to the public the representative of the whole system.

All lines of responsibility and suggestion will go up, from the local representatives to the Central Administration. All lines of authority down, from the Central Administration to the local chief.

Under the Bell organization each associated company or group of companies is now, and each division hereafter will become an autonomous whole, with its own local control and identity, and within the limits of the general policy and authority, absolute on matters pertaining to or which affect only that territory.

Such an organization avoids that general tendency in all combinations to concentrate too much, or to become unwieldy and unmanageable, and thus lose all the economical or effective operating advantages.

There are limits of active usefulness beyond which the physical or mental capacity of individuals will not extend.

The organization as constituted will be flexible enough to enable any rearrangement to be made of the whole or any part, in any way which may be found necessary or advantageous from reasons of policy or from business or legal reasons, without affecting the business.

Future financing may be done locally, by the divisions or districts, or it may be done by the Central Administration, or partly by each, as best will meet commercial or business conditions at the moment. It will be necessary only to consult expediency.

But the great advantage is that each division and each sub-division within wide limits is an autonomous whole; there is life and responsibility in the administration and operations of every separate division and sub-division—such life and responsibility as will carry the business along as an independent entity for almost indefinite periods under any possible conditions which may arise. With such conditions, nothing can happen which would be disastrous to the business, for whatever might happen would autonomously right itself, or be righted by the concerted action of this army of individuals, or by some individual of the army, now being trained to action and to take responsibility by having responsibility put upon them.

With such a body of men, educated in technicalities

and theories, which, by practical experience, they have subordinated to usefulness, with a trained capacity for taking responsibility—steadily moving upwards—there will always be a body of fit men to choose from in any emergency.

INDEPENDENT AND OPPOSITION COMPANIES.

We have, wherever we could do so legally and upon satisfactory terms, and acting with the acquiescence and consent of the local public and local authorities, purchased, merged or made connecting contracts with a large number of independent or opposition companies. Wherever these arrangements have been completed and put into operation there seems to be general satisfaction with the result.

Our policy in relation to independent companies was set forth in detail in the following announcement made early in the present year, but which has been in effect to a considerable extent for a long time:

“In order that the American Telephone and Telegraph Company and its Associated Companies may follow the same policy with respect to maintaining toll connections with independent companies, it seems wise to state just what that policy is in this regard, and to advise the Associated Bell Companies and ask them to adopt the same for their guidance.

“FIRST. The Associated Bell Companies will extend toll line connections to any point or to any company where opposition exchanges do not exist, and where the result of such toll line connections would be a reasonable return upon the investment involved in the connection.

“The terms and conditions for transmitting or receiving toll or long-distance messages at such points shall be fair and equitable and as favorable as the terms and conditions extended to any other companies operating under similar conditions.

“SECOND. Should any Associated Bell Company acquire, by purchase or otherwise, any toll line which has connection with any independent exchange or toll line, all facilities enjoyed at the time of the acquisition by the independent exchanges or toll lines for sending or receiving messages shall be

continued. When increased facilities shall be needed from time to time, such facilities shall be subject to future contracts which shall be made fair and equitable to both parties.

"THIRD. Should any Associated Bell Company acquire, by purchase or otherwise, any independent exchange property which has toll line connections, the Associated Bell Company will not cut off or disturb in any way such connections.

"FOURTH. It is to be understood that all existing connecting contracts or arrangements between independent companies or between independent and Bell Companies shall continue without interruption should there be any change in the ownership, thus preserving the status of the situation.

"FIFTH. It is to be understood in all of the above cases that it is the wish and intention to preserve any facilities or connections which independent companies and their patrons may enjoy at the time the property of an independent company may be acquired, with such increase of the same facilities as may be necessary on account of future growth and extension of the business; but it is not the intention that by virtue of such acquisition, the range of facilities of any independent company or of the patrons of any independent company shall be increased.

"SIXTH. The Associated Bell Companies will not require connecting companies to use any special make of apparatus or equipment—the only requirement will be the use of such facilities and equipment as will give commercial service.

"SEVENTH. It is to be distinctly understood that this policy does not in any way contemplate physical connection between opposition exchanges, nor does it contemplate the interchange of messages between two or more exchanges located within the same town or community."

Statements are very freely made that whenever these combinations have been brought about rates have been increased to an unreasonable amount.

Rightly or wrongly—whether through ignorance or for other purposes—franchises for opposition exchanges were obtained on the promise of low rates and improved service, and capital was obtained on promises of large profits. These opposition exchanges were established as a rule in the cream of the territory and took in little or no

unproductive territory, and built up no outside connections except where a profitable business could be obtained. The financial results are well known—few, if any, of the inducements held out were realized or promises made fulfilled. Increases in rates fixed in the franchise were applied for on the ground that without an increase the companies could not continue operation—many could not and did not continue.

In the face of these conditions, and excepting a few places where competitive conditions made it impossible, the Bell System has substantially maintained standard rates, averaging considerably higher than the opposition rates, and notwithstanding the higher average rate, the Bell gain in places where there was opposition was much greater than the opposition gain in stations.

Wherever these combinations have taken place the rates not standard have been made standard, and frequently no increases in rates took place, except such as were consequent upon the increase in the size of the exchange, and in no case have the rates even approximated the combined rates of the two exchanges.

Wherever these rates have been increased, it has been done by and with the consent of the subscribers to the exchanges, and with the direct authority or acquiescence of the public authorities.

It does seem as though through the open public knowledge of so many failures on the part of opposition telephone companies to give lower rates and better service with profit, and the open acknowledgment of the impossibility of doing this, there might be a cessation of the assertions so freely and so often made that the Bell System is making unreasonable dividends out of excessive profits, derived from exorbitant charges for service, particularly those assertions originating, as most of them do, at places in territory in which the service of the Bell System has been operated without any profit for years.

There is no way of getting the profits out of the com-

pany except through dividends and interest, as all surplus has been put back into the plant, and the average dividends paid on the outstanding stock of the associated Bell companies for 1911 were 6.3 per cent., while the average profits were 7.93 per cent., as shown on previous pages. The correctness of these statements has been verified many times by the examinations made by official bodies of control and regulation.

The telephone using public is willing to pay sufficient in the way of charges to maintain such a system as the Bell System, as against a cheaper but less efficient or less universal service, and the telephone using public is willing that fair and reasonable dividends should be paid.

What possible good can come from these mistaken assertions of conditions, is hard to understand, and why they should be made when it is so easy to ascertain the facts, is even harder.

We repeat what we have said in substance in previous reports:

If any company gives good service, meets all reasonable demands of the public as to rates and service, does not earn more than sufficient to provide for the maintenance of its plant and reconstruction of worn out or obsolete plant, pays fair wages to its operative force and staff, *pays only fair dividends upon the capital invested—if a company is doing only this, its rates and charges to the public cannot be unreasonable*—unless the position taken by a legislator in a certain state is to be endorsed by the public, which can hardly be the case.

This gentleman said: "If I found a telephone company *had not been paying its stockholders anything*, I should say the company was a little hungry to ask for 8 per cent."

The final decision in these matters now largely rests with bodies of control and regulation, and if control and regulation of public utilities are to stand, they can stand only because the results are of benefit to all concerned, and permanently beneficial results cannot come from one-sided or partisan action. The

public cannot be benefited by destruction of the companies or by impairing the efficiency of the service rendered, while on the other hand too much latitude to the companies might only reproduce the causes from which all are now suffering.

Centers of business, and of population, the collecting and distributing centers of commerce, exist for the convenience of the community as a whole. No community can remain prosperous if served by bankrupt or unprofitable public service corporations.

"Sufficient" and "Efficient" facilities for intercourse and intercommunication between the commercial centers and the territory contributory or dependent, make the most effective instrument of prosperity that can exist.

PUBLIC RELATIONS.

Our views on the relations between industrial or utility corporations and the public, particularly our own relations, are so simple and direct as to seem almost commonplace, and to make reference to them seem like repetition. It is, however, only through repetition that we can be sure of a thorough understanding, and it is only by a thorough understanding that we can get that well-informed, intelligent public opinion that we desire.

We believe that our company has a most vital interest in, and that our future success and prosperity depend upon the working out of the telephone and telegraph problem in a way that meets with the approval of the public as a whole.

We believe, and we think the public is fast coming to believe:

That telephone service to be perfect must be universal, intercommunicating, interdependent under one control, and that no isolated section can be considered independently of any other or of the whole system, and that rates must be so

adjusted as to make it possible for everyone to be connected who will add to the value of the system to others.

That the highest commercial value of the telephone service depends on its completeness, on the extent and comprehensiveness of its possibilities of intercommunication not only between individuals but between aggregations of individuals, *i.e.*, communities.

We believe that we are working this problem out on the broad lines of the greatest benefit to the public, and that this is evidenced by the fact that our standards and lines of organization and operation are the standards the world over.

As a corollary to this—we recognize a “responsibility” and “accountability” to the public on our part, which is something different from and something more than the obligation of other public service companies not so closely interwoven with the daily life of the whole community.

But, in admitting this responsibility and accountability on our part, we must insist that the measure of it shall not be determined by impossible standards, *that equity and fairness shall be, and personal and political exigencies or partisan advantages shall not be*, the basis of judgments and requirements.

We cannot conceive of anything more unfair than was the spirit which actuated a minority—small, it is to be hoped—of a political club which stands for high purposes, when it was proposed to pass a resolution recommending,

“such action with regard to telephone rates and service as shall strengthen the party before the people of this state.”

The same spirit actuates bodies or committees undertaking to legislate on service corporations when report after report of independent experts employed by those bodies to examine and report conditions on which to base action is objected to and rejected because the reports do not conform to their preconceived ideas of political desires or interests, and at the same time these

bodies openly demand a report that does conform to their ideas.

This is only illustrative of the tendency on the part of individuals or temporary bodies, without any, or at the best with a very superficial or partisan, knowledge, often prejudiced by their own interests, to attempt to pass on complex business questions.

In our relations with permanent bodies of control and regulation during the past year, we have had so little in the way of difference or difficulty as to be almost negligible. In presenting or defending our cases, we have tried to be governed by equity to ourselves and consideration to the public in every way, and have given such full reasons and such full facts to substantiate our cases that the only particular differences were those bound to exist between a public commission and a corporation, each trying to do what was best from its point of view.

Wherever we have had serious difficulties with representative bodies or the public, it has almost always been because those representing the public or legislative bodies were of temporary nature.

In all such cases we have presented our side with the same care as to the rights of ourselves and consideration for the public as in cases before permanent bodies. As a result our position and claims have been conceded and sustained, or if not, and it has been necessary to resort to the courts, we have in most instances been satisfactorily vindicated.

This only emphasizes the fact that all regulation and control of corporations serving the public should be by permanent bodies, judicial in their attitude, equitable in their purposes and actions, governed by a few simple laws based on the rights of the individual, the corporation and the community, and applied after the fullest examination and consideration.

The opinions and the facts that controlled or influenced the judgment should be matters of record, with the constitutional right of appeal in the corporation.

Temporary committees of bodies legislative in their functions, though trying to assume a judicial attitude, do act from an entirely legislative and sometimes political standpoint. Their decisions are frequently contradictory, irreconcilable and impossible, even when these committees are composed of fairly disposed men. Nor is this any reflection upon such committees. Their inability arises from the manner of their selection, the temporary nature and selfish interests of their positions, the engrossing nature of their many other duties, and the lack of time to familiarize themselves with questions involving years of practice and experience.

GOVERNMENT OWNERSHIP.

The discussion of the government ownership of the wire companies is not likely to become anything more than academic, at least for the present.

Even if the final conclusion should favor government purchase of all wire plants, there would be no unfavorable consequences to the shareholders of the wire companies other than the obligatory liquidation. Any possible award for the property which the security holders would be obliged to accept would give them better than current prices for their securities.

It is, however, highly desirable that if there is to be discussion, it should be on the right lines and that whatever be the conclusion it should be reached after a full consideration of conditions as they exist, and of the practical experience of other countries, and not be based upon theories, expectations, prophecies, promises with no power to fulfill, or wrong ideas of existing conditions.

It is only in comparatively recent years that the present prevailing theories of mail service have been evolved, and the free interchange of communication, of intelligence, ideas and personal information has become a fundamental necessity to our modern civilization with its scattered and widespread family and racial interests; it is now estab-

lished as one of the obligations of modern government. Expense is the last consideration, while uniformity, extent of service, absence of discrimination and equal facilities for every one and every place are over and above every other consideration. No matter how much the costs in any particular service may vary, charges for the same classes of service must be uniform, moderate and within reach of all. Every one and every place must be on a plane of equality regardless of varying conditions.

The use of the mail service is so widespread and general, and its availability of such national importance, that whether it should be at the expense of the general revenue of the nation or of the specific revenue of the service is immaterial; even economy and efficiency are secondary to the inviolability, the freedom from espionage, from suspicion of private gain or benefit, from restrictions tending to limit its use.

It is a service that must be maintained by the whole for the common benefit of the whole.

Quite a different proposition would be the government operation of the telegraph.

Instantaneous and immediate transmission of communications is as yet a convenience or luxury, although under modern methods of business and commerce, it is an economical alternative to the cheaper mail service in business operations. The use of the telegraph may be a popular convenience, but it is not a necessity and is still confined to the comparatively few, and for that reason should be at the cost of the few that find benefit and profit in that use. The ratio of the use of the mails to the telegraph is nearly 100 to 1, and less than 5 per cent. of the whole population use the telegraph.

The Post Office Department is an organization for the operation of the mail service over and through transportation facilities under private ownership and operation. The mails are taken from and delivered at the post office by the transportation companies, and despatched on trains over which the Post Office Department has no con-

trol or concern whatever. The Post Office Department has its own problems peculiar to its service, many of them intricate and vexatious, but none such as are connected with the operations of a transportation company. There is no capital investment for transportation plant and relatively little for equipment. In the few instances in other countries where there is government ownership of transportation facilities, it is not because of or on account of the mail service.

Government operation of the telegraph would necessarily require the ownership, maintenance and operation of the transmission facilities and equipment, as well as the solution of many complex problems incident thereto, including that of profit and loss, all new to our form of government. Hundreds of millions must be invested in purchase or reproduction of facilities, all the charges on which, together with other costs, must be met out of the revenue from the service or become a charge on the general public revenue—all for the benefit of the comparatively few who would directly or indirectly profit by the use of the service.

The question of success or failure in any enterprise rests almost entirely with the organization. To create any new organization of such magnitude would be most difficult under favorable conditions, but the conditions which must control under government ownership would make doubtful the creation of an efficient and economical organization, or the profitable operation of a business which even under private operation has such a small margin of profit.

If the telegraph could take the place of the mails in popular use, all considerations other than public convenience might be brushed aside, but this it can never do; the great part of ordinary correspondence must be secret, it must be the written personal communication that is transmitted. The correspondence must not be limited in length or restricted in vocabulary, and in the ordinary affairs of life the time of transmission is relatively

unimportant. The telegram may be used as an alternative but never as a substitute for the mails in the uses peculiar to them.

Immediate or instantaneous transmission of communication will always be relatively expensive, in that transmission facilities must be adequate to the maximum requirements at any time, with idle, unused facilities most of the time as a consequence. Overloads can only be taken care of by delay, which takes away all there is of value in immediate transmission.

The only possible way in which a telegraph service intermediate in value and cost between the mail and the telegraph can be given is by maintaining rates on instantaneous business at a point which will meet the entire fixed charges of the plant, in addition to the other costs of that particular service. All who make use of such service can well afford such charges; dispatch and efficiency are the only considerations. The idle intervals can then be employed for particular services at popular rates, based on operating costs and a small margin of profit.

The inevitable tendency under government ownership towards reduction of rates and uniform charges for all classes of service, would be destructive of profit in operation, and would make possible any popular services only at the cost of the general revenue.

In the arguments and prophecies that are being used in support of government ownership, history is but repeating itself. The same undervaluation of existing plants, the same exaggeration of the profits, the same optimistic and exaggerated statements of what would be the results of government operation that were made in favor of government ownership in other countries are now being made.

The facts are, that there is hardly a telegraph or telephone system in the world now operated by any government which shows a profit, even under accounting methods employed, and not one that would not show a deficit under accounting methods obligatory upon private

enterprise. For authority, see any department report of any government telegraph system.

Another consideration, much misunderstood and often misstated, is the supposed superiority and cheapness of service in other countries.

Taking the kind and quality of service, the extent of territory covered and the wages to employees, there is no service in the world cheaper than the telegraph and telephone service of the United States. For authority, see statements made by departmental heads and reports of commissions of the various governments of Europe, and more recently of Manitoba, and the experience of travelers and business men the world over, and the statement of the Postmaster General of Great Britain who said in Parliament that if he could have the charges made in the United States, he could give as good service.

There is not a single instance of telegraph or telephone companies operated by private corporations in competition with government operation, where the private service is not better than the government and profitable, against unprofitable government operation, if untrammelled by government interference.

TELEPHONE AND TELEGRAPH.

The inter-operations of the telegraph and telephone systems are improving rapidly. The collection and delivery of telegraph messages by telephone is becoming popular. Telegraph facilities have been largely extended, and will soon be much further extended, by agency telegraph offices established at telephone toll stations, and by the connection of the telephone system with telegraph "all-night" offices. All these innovations have been of convenience and advantage, and in case of emergency a great benefit, to the public, but they have not as yet been productive of economy in operation or of profit.

The Western Union system is to the telegraph situation what the Bell System is to the telephone situation, in that

each tries to give a comprehensive universal service, but the comparison ends there.

The Western Union has over 25,000 offices in over 21,000 places, and in addition many thousand agency offices at the toll stations of the Bell System. From less than 2,000 of the 21,000 places, with an aggregate population of about 40,000,000, over 90 per cent. of its entire revenue is obtained. Nearly 17,000 of the 21,000 places have an average revenue of but slightly above \$10 a month with a maximum of \$50 a month. Some joint operating arrangement, generally with the railroad telegraph service, has been made for these and many other places where the revenue is insufficient to maintain an exclusive Western Union office. The increasing demand of the railroad telegraph service upon its operators, and because their first duty is to the railroad service, places the commercial telegraph service in a secondary place, which, with the best of intentions, is not conducive either to promptness or efficiency.

The Bell Telephone System has scattered over the whole territory exchanges or toll line centers from which radiate subscribers' circuits and branch toll line circuits. These centers are connected with each other by toll or long-distance circuits and constitute the telephone system. The toll circuits of the telephone system reach 70,000 places. At most of these places and upon substantially all of these branch toll circuits, and on many circuits connecting into the intermediate stations on trunk lines, there is not enough business to occupy fully either operators or wire facilities; were it not for the indirect advantage to the whole system few, if any, of them would have been established. While the telephone cannot be used interchangeably with the telegraph instruments in the transmission of messages over busy circuits by busy operatives, the "not-busy" operatives and circuits could be used for telephone and telegraph service "alternately" instead of "simultaneously," as there is not enough business to justify such circuits being "composited," i.e., arranged

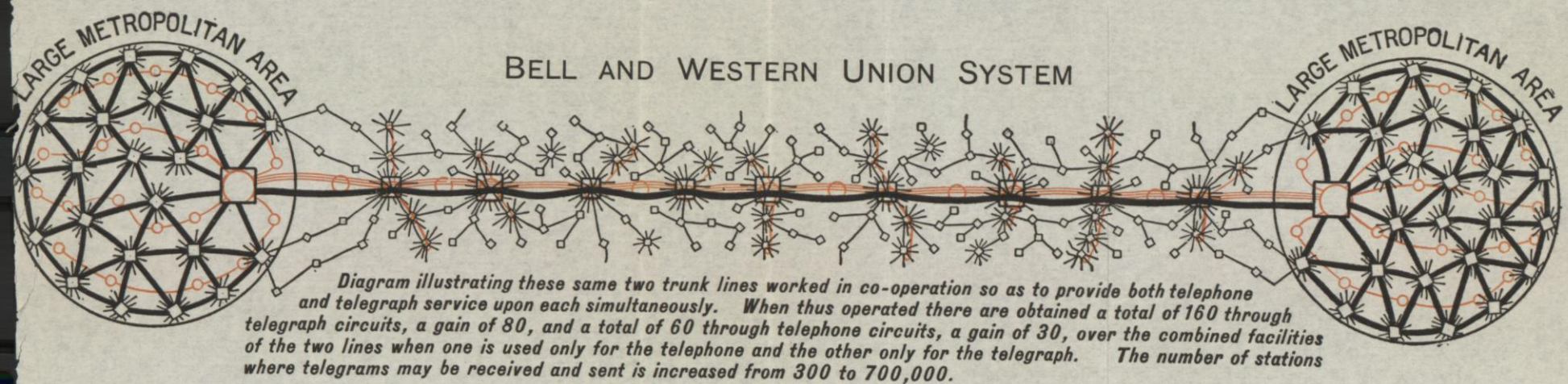
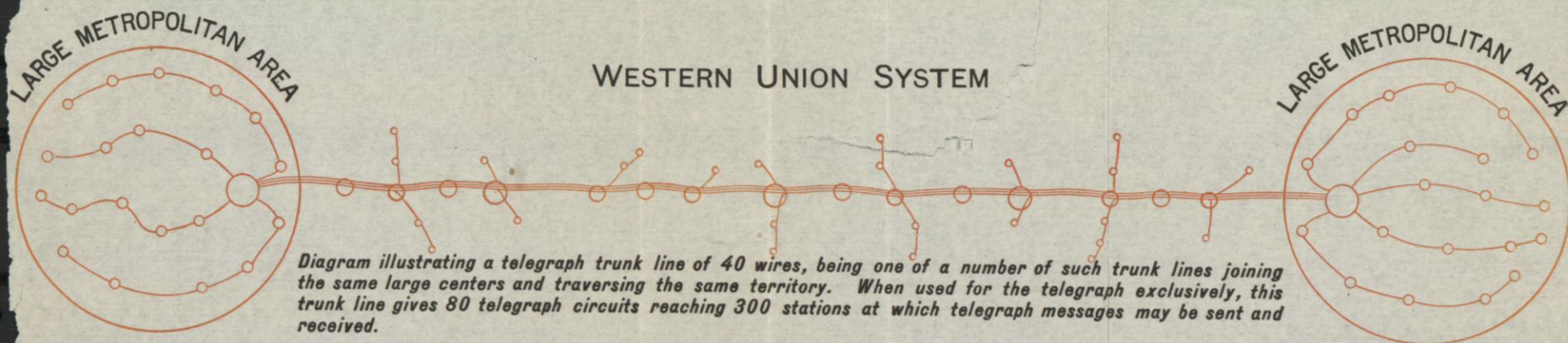
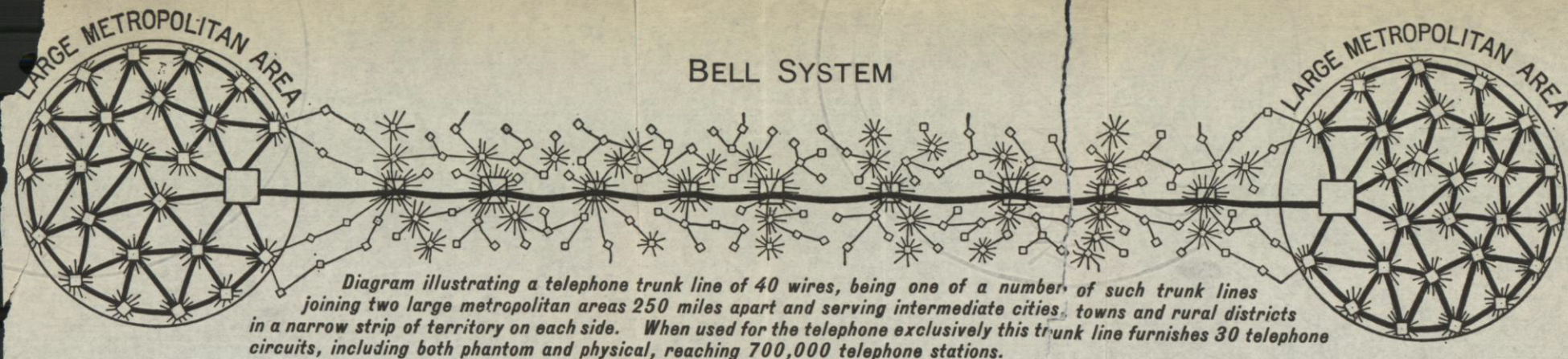
for simultaneous use of telegraph and telephone. The joint use of such lines and operatives would be a source of economy. At busy offices and on busy circuits, the circuits could be "composited" for the simultaneous use for telegraph and telephone purposes. Each service would require its distinct operating force and its distinct offices, as the services rendered by the telegraph and the telephone are functionally and fundamentally different although both use wire circuits. The telephone makes up a circuit and places it at the use of the customers, who do the communicating; *i.e.*, it leases its circuits to others for personal communication. The telegraph by its own operators performs all the services of collecting, transmitting and delivering messages; *i.e.*, it transmits over its circuits, for others, personal communications.

The great economy and advantage would come from the "compositing" or simultaneous use of one system of circuits for the two services, eliminating entirely one of the wire systems. The advance in the state of the art of "compositing" lines for joint use of the telephone and telegraph has been very marked in the very recent past.

The accompanying diagram illustrates a small section each of the telephone and the telegraph system. It is self-explanatory.

The diagram shows that the existing wire mileage of the present telephone toll circuits and telegraph plants, brought up to standard construction with some provision for deficiencies or extensions, if "composited" or used jointly, would for all practical purposes be the equivalent of two plants each of the same mileage, one for telephone and one for telegraph; or to put it another way: the wire mileage necessary to give the same service need be about half the combined wire mileage of the two systems separately operated as now.

The annual gross revenue from either a telephone or a telegraph system should be approximately 33 per cent. of the total cost of, or the investment in plant. If in two



Telephone Central Office

□ Telephone Toll Station



Telegraph Office



LARGE METROPOLITAN AREA



LARGE METROPOLITAN AREA

BELL SYSTEM

Diagram illustrating a telephone trunk line of 40 wires, being one of a number of such trunk lines joining two metropolitan areas 100 miles apart, and serving intermediate cities, towns and rural districts in a narrow strip of territory on each side. When used for the telephone exclusively this trunk line furnishes 80 telephone circuits, including both stations and systems, receiving 740,000 telephone calls.

WESTERN UNION SYSTEM

Diagram illustrating a telegraph trunk line of 40 wires, being one of a number of such trunk lines joining the same large centers and traversing the same territory. When used for the telegraph exclusively, this trunk line gives 80 telegraph circuits reaching 300 stations at which telegraph messages may be sent and received.

BELL AND WESTERN UNION SYSTEM

Diagram illustrating these same two trunk lines worked in co-operation so as to provide both telephone and telegraph service upon each circuit. When thus operated there are obtained a total of 160 through telephone circuits, a gain of 80, and a total of 80 through telephone circuits, a gain of 80, over the combined facilities in the two lines when used only for the telephone and the telegraph. The number of stations where messages may be received and sent is increased from 300 to 700-800.

Telephone Central Office

Telephone Office

systems of equal size one plant were eliminated and both services were performed over the other, the percentage of joint revenue to plant would be substantially doubled, or 65 per cent. To put it in another way: The maintenance of a wire plant costs about 30 per cent. of the annual gross revenue from that plant. The simultaneous use of a plant for both purposes would mean maintenance of one wire system against the doubled revenue from both services, a decrease in maintenance alone of about 15 per cent. of the gross revenue. In addition to these savings there would be the savings of the capital charges and of taxes on plant which would be made unnecessary. This brings within the realm of possibility a reduction of from 20 per cent. to 25 per cent. in the gross charges or gross revenue without affecting the profits of the business.

In order to avoid confusion it must be distinctly borne in mind that the telephone service referred to here is the toll or long-distance service and not the circuits of the exchange service which could not be used for any other purpose. This toll or long-distance service is so intimately interwoven and interdependent both in operation and use with the telephone exchange service that it could not be separated, but the operation of the toll circuits in connection with the exchange circuits would not interfere with their use for telegraph purposes by a regularly organized telegraph staff.

These are the possibilities, fraught with all sorts of advantage to the public. Some of them are so clearly without the "restrictions" of business operation that they can be put in operation as fast as the physical changes can be made in the plant, but those of the greatest advantage, prudence would dictate postponing until after these business restrictions are made clearer or more definitely interpreted.

For the Directors,

THEODORE N. VAIL,

President.

	Dec. 31, 1895.	Dec. 31, 1900.	Dec. 31, 1905.	Dec. 31, 1910.	Dec. 31, 1911.
Miles of Exchange Pole Lines.....	25,330	30,451	67,698	120,175	131,379
Miles of Toll Pole Lines.....	52,873	101,087	145,535	162,702	163,351
Total Miles of Pole Lines.....	78,203	131,538	213,233	282,877	294,730
Miles of Underground Wire.....	184,515	705,269	2,345,742	5,992,303	6,831,667
Miles of Submarine Wire.....	2,028	4,203	9,373	24,636	26,936
Miles of Aerial Wire.....	488,872	1,252,329	3,424,803	5,625,273	6,074,012
Total Miles of Wire.....	675,415	1,961,801	5,779,918	11,642,212	12,932,615
Comprising Toll Wire.....	215,687	607,599	1,265,236	1,963,994	2,060,514
Comprising Exchange Wire.....	459,728	1,354,202	4,514,682	9,678,218	10,872,101
Total.....	675,415	1,961,801	5,779,918	11,642,212	12,932,615
Total Exchange Circuits.....	237,837	508,262	1,135,449	2,082,960	2,306,360
Number of Central Offices.....	1,613	2,775	4,532	4,933	5,014
Number of Bell Stations.....	281,695	800,880	2,241,367	4,030,668	4,474,171
Number of Bell Connected Stations*.....	27,807	55,031	287,348	1,852,051	2,158,454
Total Stations.....	309,502	855,911	2,528,715	5,882,719	6,632,625
Number of Employees.....	14,517	37,067	89,661	120,311	128,439
Number of Connecting Companies, Lines and Systems.....				17,845	21,454
Exchange Connections Daily.....	2,351,420	5,668,986	13,543,468	21,681,471	23,483,770
Toll Connections Daily.....	51,123	148,528	368,083	602,539	644,918

*Includes Private Line Stations.

BELL TELEPHONE SYSTEM IN THE UNITED STATES.
ALL DUPLICATIONS BETWEEN COMPANIES EXCLUDED.

COMBINED BALANCE SHEETS AT FIVE YEAR INTERVALS, 1885-1911.

	Dec. 31, 1885.	Dec. 31, 1890.	Dec. 31, 1895.	Dec. 31, 1900.	Dec. 31, 1905.	Dec. 31, 1910.	Dec. 31, 1911.
ASSETS:							
Contracts and Licenses.	\$16,732,100	\$18,925,700	\$20,005,300	\$14,794,300	\$13,313,400	\$2,943,381	\$2,943,381
Telephone Plant.....	38,618,600	58,512,400	87,858,500	180,699,800	368,065,300	610,999,964	666,660,702
Supplies, Tools, etc.....	348,500	1,021,800	1,810,000	6,464,400	11,089,500	20,987,551	20,749,568
Receivables.....	1,450,900	1,761,600	3,746,600	13,644,000	26,220,800	26,077,802	32,916,127
Cash.....	1,792,600	1,183,300	2,484,100	3,223,000	11,005,900	27,548,933	41,878,140
Stocks and Bonds.....	1,138,800	2,697,400	4,480,500	11,400,400	23,041,200	64,766,089	66,777,231
Total.....	\$60,081,500	\$84,102,200	\$120,385,000	\$230,225,900	\$452,716,100	\$753,323,720	\$831,925,149
LIABILITIES:							
Capital Stock.....	\$38,229,200	\$43,792,800	\$57,462,700	\$130,006,900	\$238,531,100	\$344,645,430	\$379,727,832
Funded Debts.....	367,400	6,473,100	10,074,100	44,137,900	93,079,500	224,791,696	241,032,822
Bills Payable.....		1,323,000	2,000,000	7,000,000	35,000,000	42,566,943	41,198,431
Accounts Payable.....	2,618,900	3,301,100	6,138,000	13,583,300	22,407,500	21,721,125	23,382,438
Total Outstanding Obligations.....	\$41,215,500	\$54,890,000	\$75,674,800	\$194,728,100	\$389,018,100	\$633,725,194	\$685,341,523
Surplus and Reserves..	18,866,000	29,212,200	44,710,200	35,497,800	63,698,000	119,598,526	146,583,626
Total.....	\$60,081,500	\$84,102,200	\$120,385,000	\$230,225,900	\$452,716,100	\$753,323,720	\$831,925,149

BELL TELEPHONE SYSTEM IN THE UNITED STATES.
ALL DUPLICATIONS BETWEEN COMPANIES EXCLUDED.

COMPARATIVE EARNINGS AT FIVE YEAR INTERVALS, 1885-1910.

	Year 1885.	Year 1890.	Year 1895.	Year 1900.	Year 1905.	Year 1910.	Year 1911.
Gross Earnings.....	\$10,033,600	\$16,212,100	\$24,197,200	\$46,385,600	\$97,500,100	\$165,612,881	\$179,477,998
Expenses.....	5,124,300	9,067,600	15,488,400	30,632,400	66,189,400	114,618,473	127,891,701
Net Earnings.....	\$4,909,300	\$7,144,500	\$8,708,800	\$15,753,200	\$31,310,700	\$50,994,408	\$51,586,297
Interest.....	27,700	278,700	655,500	2,389,600	5,836,300	11,556,864	13,610,860
Balance.....	\$4,881,600	\$6,865,800	\$8,053,300	\$13,363,600	\$25,474,400	\$39,437,544	\$37,975,437
Dividends.....	3,107,200	4,101,300	5,066,900	7,893,500	15,817,500	25,160,786	25,966,876
Surplus Earnings.....	\$1,774,400	\$2,764,500	\$2,986,400	\$5,470,100	\$9,656,900	\$14,276,758	\$12,008,561

American Telephone and Telegraph Company.

Annual Earnings and Dividends.

Year.	Net Revenue.	Dividends Paid.	Added to Reserves.	Added to Surplus.
1900.....	\$ 5,486,058	\$ 4,078,601	\$ 937,258	\$ 470,198
1901.....	7,398,286	5,050,024	1,377,651	970,611
1902.....	7,835,272	6,584,404	522,247	728,622
1903.....	10,564,665	8,619,151	728,140	1,217,374
1904.....	11,275,702	9,799,117	586,149	890,435
1905.....	13,034,038	9,866,355	1,743,295	1,424,388
1906.....	12,970,937	10,195,233	1,773,737	1,001,967
1907.....	16,269,388	10,943,644	3,500,000	1,825,744
1908.....	18,121,707	12,459,156	3,000,000	2,662,551
1909.....	23,095,389	17,036,276	3,000,000	3,059,113
1910.....	26,855,893	20,776,822	3,000,000	3,079,071
1911.....	27,733,265	22,169,450	2,800,000	2,763,815

CHARLES G. DuBOIS, *Comptroller.*

HENRY A. PIPER,
AUDITOR AND PUBLIC ACCOUNTANT,
953 OLD SOUTH BUILDING.

BOSTON, February 28, 1912.

I have examined the accounts of the Treasurer and Comptroller of the American Telephone and Telegraph Company covering the year ending December 31, 1911, and have to report as follows:

I have determined the cash in hand and in the banks and trust companies, and find the amount, after allowing for outstanding checks, to agree with the balance of cash on that date.

I have seen approved and receipted vouchers for all disbursements, and have verified the record of cash receipts.

I have seen that all notes and stock certificates owned by the company are in hand and correctly entered upon the books.

I have found all Cash book and Journal entries duly posted to the Ledger and the footings correct; and have approved the Balance Sheet.

I hereby certify that in all my investigations as above cited, I have found everything correct.

HENRY A. PIPER.

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